Attorney Docket No.: Q95659 AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/596,784

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

(original): A sintered ferrite body having a main composition comprising 63-80% 1.

by mol of Fe₂O₃, and 3-15% by mol of ZnO, the balance being manganese oxide; R_{cal} determined

from the Fe_2O_3 content X (% by mol) by the formula (1) of $R_{cal} = [200(X-50)]/(3X)$, and the ratio

R (%) of Fe^{2+} per the total amount of Fe in said sintered body meeting the condition of R_{cal} - 2.0

 \leq R \leq R_{cal} + 0.3; and said sintered body having a density of 4.9 g/cm³ or more.

(original): The sintered ferrite body according to claim 1, wherein the main 2.

composition comprises 68-75% by mol of Fe₂O₃, and 3-12% by mol of ZnO, the balance being

manganese oxide.

(previously presented): The sintered ferrite body according to claim 1, 3.

comprising 0.02-0.3% by weight (calculated as CaCO₃) of Ca, and 0.003-0.015% by weight

(calculated as SiO₂) of Si, as sub-components, per 100% by weight of the main composition.

(currently amended): The sintered ferrite body according to claim 1, wherein it 4.

said sintered ferrite body has volume resistivity of 0.1 Ω ·m or more.

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5. (previously presented): The sintered ferrite body according to claim 1, wherein it said sintered ferrite body has a minimum-core-loss temperature of 80°C-120°C.

- 6. (currently amended): An electronic part comprising formed by winding a wire around a magnetic core formed by comprising the sintered ferrite body recited in claim 1, and winding.
- 7. (original): A method for producing a sintered ferrite body having a main composition comprising 63-80% by mol of Fe₂O₃, and 3-15% by mol of ZnO, the balance being manganese oxide; R_{cal} determined from the Fe₂O₃ content X (% by mol) by the formula (1) of $R_{cal} = [200(X-50)]/(3X)$, and the ratio R (%) of Fe²⁺ per the total amount of Fe in the sintered body meeting the condition of R_{cal} $2.0 \le R \le R_{cal}$ + 0.3; and said sintered body having a density of 4.9 g/cm³ or more, said method comprising a step of adding a binder to ferrite powder, a molding step, a binder-removing step and a sintering step, said ferrite powder having a spinelization ratio S of 10-60%; the amount V (% by weight) of said binder added being in a range of $1.3 0.02S \le V \le 2.3 0.02S$, assuming that the total amount of said ferrite powder and said binder is 100% by weight; the oxygen concentration in the atmosphere from said binder-removing step to the completion of said sintering step being 0.1% or less by volume.
- 8. (original): The method for producing a sintered ferrite body according to claim 7, wherein said spinelization ratio of ferrite powder is 10-40%.

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9. (previously presented): The method for producing a sintered ferrite body according to claim 7, wherein said ferrite powder has a specific surface area of 3000-7000 m²/kg.

- 10. (previously presented): The method for producing a sintered ferrite body according to claim 7, wherein the main composition of said sintered ferrite body comprises 68-75% by mol of Fe₂O₃, and 3-12% by mol of ZnO, the balance being manganese oxide.
- 11. (previously presented): The method for producing a sintered ferrite body according to claim 7, wherein 0.02-0.3% by weight (calculated as CaCO₃) of Ca, and 0.003-0.015% by weight (calculated as SiO₂) of Si are added as sub-components to 100% by weight of said main composition.
- 12. (new): The sintered ferrite body according to claim 1, wherein said sintered ferrite body has a maximum magnetic flux density of 520 mT or more measured at 100°C in a magnetic field of 1000 A/m.
- 13. (new): The sintered ferrite body according to claim 1, wherein said sintered ferrite body has a reduction ratio of a maximum magnetic flux density from 20°C to 100°C of 10% or less.
- 14. (new): The sintered ferrite body according to claim 2, wherein said sintered ferrite body has a maximum magnetic flux density of 520 mT or more measured at 100°C in a magnetic field of 1000 A/m.

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(new): The sintered ferrite body according to claim 2, wherein said sintered 15. ferrite body has a reduction ratio of a maximum magnetic flux density from 20°C to 100°C of 10% or less.